## PERFORMANCE AND SYSTEM AUDITS 13.0

Audits are systematic examinations to determine whether activities comply with planned arrangements, whether the arrangements are implemented effectively, and whether the results are suitable to achieve project objectives.

No field or laboratory audits are anticipated for this project. The contract laboratory regularly undergoes performance evaluation audits by the USACE and has current validations for the analytical methods to be used for this project.

## PERFORMANCE AND EXTERNAL AUDITS 13.1

In addition to conducting internal reviews and audits, as part of its established quality assurance program, the laboratory is required to take part in regularly-scheduled performance evaluations and laboratory audits from state and federal agencies. They are conducted as part of the certification process and to monitor the laboratory performance. The audits also provide an external quality assurance check of the laboratory and provide reviews and information on the management systems, personnel, standard operating procedures, and analytical measurement systems. Acceptable performance on evaluation samples and audits is required for certification and accreditation. The laboratory shall use the information provided from these audits to monitor and assess the quality of its performance. Problems detected in these audits shall be reviewed by the QA Scientist and Laboratory Manager, and corrective action shall be instituted as necessary.

## SYSTEMS/INTERNAL AUDITS 13.2

As part of its Quality Assurance Program, the Laboratory Quality Assurance Scientist shall conduct periodic checks and audits of the analytical systems. The purpose of these is to verify that the analytical systems are working properly, and that personnel are adhering to established procedures and documenting the required information. These checks and audits also assist in determining or detecting where problems are occurring.

The QA Scientist periodically will submit laboratory control samples. These samples will serve to check the entire analytical method, the efficiency of the preparation method, and the analytical instrument performance. The results of the control samples are reviewed by the QA Scientist who reports the results to the analyst and the Laboratory Director. When a problem is indicated, the QA Scientist will assist the analyst and laboratory management in determining the reason and in developing solutions. The QA Scientist also will recheck the systems as required.